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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,074	10/14/2003	Donald Paul Archiable	VOCPI01US	4331
29393 7590 11/16/2009 ESCHWEILER & ASSOCIATES, LLC NATIONAL CITY BANK BUILDING 629 EUCLID AVE., SUITE 1000 CLEVELAND, OH 44114			EXAMINER VUONG, QUOCHIEN B	
			ART UNIT 2618	PAPER NUMBER
			NOTIFICATION DATE 11/16/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing@eschweilerlaw.com

Office Action Summary	Application No. 10/685,074	Applicant(s) ARCHIABLE, DONALD PAUL	
	Examiner Quochien B. Vuong	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 38 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/24/2009 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novakov (US 6,571,103) in view of Hightower et al. (US 5,276,277).

Regarding claim 1, Novakov discloses a system (figure 1), comprising:
an information receiving logic (12) configured to receive an information signal;
a driven element (10) configured to transmit an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (using Bluetooth transceiver); and a transmission line (line between 12 and 10) configured to facilitate transferring a first intermediate signal, from which the outbound

Art Unit: 2618

information signal is derived, from the information receiving logic to the driven element; where at least one of the information receiving logic, the driven element, and the transmission line are integrated into a PVLAN-space element comprising one of a structure and a piece of furniture(column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space). Novakov does not specifically disclose the transmission zone is less than forty eight inches in a plane. However, Hightower et al. disclose the transmission range can be adjusted depending on the desired system (column 12, lines 54-65). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desired office space that is less than forty eight inches in a plane to the system of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Regarding claim 2, Hightower et al. disclose a shield configured to mold the transmission zone (column 15, lines 52-63).

Regarding claim 3, Hightower et al. disclose the transmission zone molded to be smaller than an environment within which the system is located (column 15, lines 52-63).

Regarding claims 4 and 5, it would have obvious for the shield of Hightower et al. to be frequency non-specific as a system design preference so that the system can be used in any frequency.

Regarding claims 6-8, Novakov and Hightower et al. do not specifically disclose the molded zone being substantially spherical. However, the examiner takes Official notice the spherical transmission zone is well known in the art. Therefore, it would have been obvious for one having ordinary skill in the art to make the transmission zone being substantially spherical as desired and in fact most of the transmission zones are substantially spherical in space.

Regarding claim 9, Novakov discloses the driven element configured to transmit the outbound information signal to an electronic device substantially residing within the limited zone, and the designated power output of the outbound information signal being substantially less than a power of an outbound signal from the electronic device (column 3, line 66 – column 4, line 46).

Regarding claim 10, Hightower et al. disclose the PVLAN-space element comprising one or more of, a desktop, a tabletop, a desk, a table, a kiosk surface, a work surface, an airplane seat, an airplane seat-back, an airplane tray-table, an automatic interior, medical furniture, a medical enclosure, and a cabinet (see figures 1-4).

Regarding claims 11-18, the molded transmission zone of the system of Hightower can obviously be less than twenty four inches in plane and substantially discontinuous from a space a user's body occupied when operating in an environment within which the zone is located as one would arrange the shields as desired depending on the system design preference (column 12, lines 54-65).

Regarding claims 19-21, the system of Novakov and Hightower et al. can obviously comprising a plurality of driven element configured to create a plurality of transmission zones or plurality of shields configured to mold the plurality of transmission zones and the transmission zones molded so as to not overlap each other as a system design preference to have more than one transmission zones.

Regarding claims 22-25, it would have been obvious for the system of Novakov and Hightower et al. comprising transmission zones molded so as to not overlap each other, two or more shields configured to abate a portion of the zone, divide and arrange in any position as a system design preference serving the same function as to provide a plurality of transmission zones.

Regarding claims 26-28, Novakov disclose where the information receiving logic, the driven element, and the transmission line are integrated into a single PVLAN-space element (column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space).

Regarding claim 29, Hightower et al. disclose an effective zone indicator on the PVLAN-space element work-surface configured to visually illustrate a boundary associated with the unabated portion of the zone (see figure 1; column 12, lines 54-65).

Regarding claim 30, Novakov discloses where the information receiving logic, the driven element, and the transmission line are integrated into a single PVLAN-space element (column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space).

Regarding claim 31, Hightower et al. disclose an effective zone indicator configured to visually illustrate a boundary associated with the transmission zone, and the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device (see figure 1; column 12, lines 54-65).

Regarding claim 32, Hightower et al. disclose an effective zone indicator configured to visually illustrate a boundary associated with the transmission zone; where the effective zone indicator is located on a PVLAN- space element surface (see figure 1; column 12, lines 54-65). And it would have been obvious for the system of Novakov and Hightower to have plurality of zones as a system design preference to have more than one transmission zones.

Regarding claim 33, Novakov (figure 1) discloses a method, comprising: receiving an information signal; selectively deriving an intermediate signal from the information signal (AP12); selectively relaying the intermediate signal to a driven element (LS 10); transmitting an outbound information signal derived from the intermediate signal from the driven element at a designated power output and designated frequency, where the combination of designated power and designated frequency produce a limited zone (within the Bluetooth range); the driven element configured to transmit the outbound information signal to an electronic device substantially residing within the limited zone, and the designated power output of the outbound information signal being substantially less than a power of an outbound signal from the electronic device (column 3, line 66 – column 4, line 46, wherein the Bluetooth

Art Unit: 2618

range reads on the PVLAN-space). Novakov does not specifically disclose the transmission zone is less than thirty six inches in a plane; and positioning one or more shields to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal. However, Hightower et al. disclose the transmission range can be adjusted depending on the desire system (column 12, lines 54-65), and positioning one or more shields to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal (column 15, lines 52-63). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desire office space that is less than thirty six inches in a plane and positioning one or more shields to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal to the method of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Regarding claim 34, Novakov discloses the information signal comprising one or more of, a telephone signal, a television signal, a computer signal, a facsimile signal, an

Art Unit: 2618

internet signal, a DSL signal, a broadcast signal, a GPS signal, and a radio signal (column 14, lines 5-8).

Regarding claim 35, Hightower et al. disclose the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device (see figure 1; column 12, lines 54-65). Novakov and Hightower et al. do not specifically disclose the driven element being configured to transmit the outbound information signal in a power range from about 0.01 mW to about 0.1W. However, the examiner takes Official notice that transmitting signal in a power range from about 0.01 mW to about 0.1W is well known in the art. Therefore, it would have been obvious to adapt the well know transmission power range to the method of Novakov and Hightower et al. as a system design preference for a specific desire system.

Regarding claim 36, Hightower et al. disclose the driven element being configured to transmit the outbound information signal in a frequency range from about 500 MHz to about 1.5 GHz (column 11, line 66 – column 12, line 42).

Regarding claim 37, Novakov discloses a system (figure 1), comprising:

an information receiving logic (12) configured to receive an information signal;
a driven element (10) configured to transmit an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (using Bluetooth transceiver); and a transmission line (line between 12 and 10) configured to facilitate transferring a first intermediate signal, from which the outbound information signal is derived, from the information receiving logic to the driven element;

Art Unit: 2618

and an override panel configured to provide access to a wired connection by which the information signal can be received (figure 1; column 3, line 66 – column 4, line 15); where at least one of the information receiving logic, the driven element, and the transmission line are integrated into a PVLAN-space element (column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space); and the system could have been obvious to be placed on a piece of furniture as desired by a user. Novakov does not specifically disclose the transmission zone is less than forty eight inches in a plane; and a shield configured to perform one or more of, molding the transmission zone, to at least partially block electromagnetic radiation from entering the transmission zone, and to at least partially block the outbound signal from leaving the transmission zone. However, Hightower et al. disclose the transmission range can be adjusted depending on the desired system (column 12, lines 54-65); and a shield configured to perform one or more of, molding the transmission zone, to at least partially block electromagnetic radiation from entering the transmission zone, and to at least partially block the outbound signal from leaving the transmission zone (column 15, lines 52-63). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desired office space that is less than forty eight inches in a plane and a shield configured to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal to the system of Novakov as a system design preference to reduce

Art Unit: 2618

electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Response to Arguments

Applicant's arguments filed 03/20/2009 have been fully considered but they are not persuasive.

Regarding the 35 USC § 112, first paragraph, Applicant's arguments are persuasive. The previous rejection has been withdrawn.

Regarding claim 1, Applicant argues that Novakov and Hightower do not disclose “a system wherein at least one of the information receiving logic, the driven element, and the transmission line are integrated into a PVLAN-space element comprising one of a structure and a piece of furniture”. The examiner, however, does not agree with the Applicant. Since the system of Novakov and Hightower is used indoor within a house (see Novakov figure 1, and column 3, line 66 - column 4, line 57; and Hightower figure 1), therefore the combination of Hightower and Novakov reads on the claimed limitation as in the rejection above.

Regarding claims 9 and 33, Novakov also teaches the transmission power between the antenna 24 and antenna 42 is much less than the transmission power of cellular radio transmission antenna 44 (see figure 1).

And further Hightower discloses the electromagnetic transmission can be individually designed to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space (column

Art Unit: 2618

12, lines 54-65); therefore it would be obvious for the transmission zone to be in any short ranges including forty eight, thirty six, or twenty four inches in space.

The features of other claims are also addressed in the rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quochien B Vuong/

Application/Control Number: 10/685,074

Page 12

Art Unit: 2618

Primary Examiner, Art Unit 2618